

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1. (Previously presented) Vector for the expression of immunoglobulin-cytokine fusion proteins in malignant B cells, comprising the following components operably linked to each other
  - (a) a region of at least 1.5 kb which is homologous to a region of the  $\mu$  intron or the  $k$  intron;
  - (b) at least one DNA sequence encoding a domain of an immunoglobulin or a functional part thereof;
  - (c) a DNA sequence encoding a cytokine; and
  - (d) a marker gene which is selectable in eukaryotic B cells and contains a functional enhancer region.
2. (Original) Vector according to claim 1, wherein said region of at least 1.5 kb contains a functional  $C_\mu$  or  $C_k$  enhancer.
3. (Original) Vector according to claim 1, wherein said region of at least 1.5 kb contains a non-functional  $C_\mu$  or  $C_k$  enhancer.
4. (Previously presented) Vector according to claim 1, wherein the marker gene selectable in eukaryotic B cells contains a non-functional enhancer.
5. (Previously presented) Vector according to claim 1, wherein the marker gene selectable in eukaryotic B cells lacks an enhancer.
6. (Previously presented) Vector according to claim 1, wherein the DNA sequence of (b) encodes a constant region or a functional part thereof.

7. (Original) Vector according to claim 1, wherein the region homologous to a region comprising the  $C_\mu$  or the  $C_k$  enhancer of the  $\mu$  or the  $k$  intron comprises at least 1.9 kb.

8. (Original) Vector according to claim 1, wherein the region homologous to a region comprising the  $C_\mu$  or the  $C_k$  enhancer of the  $\mu$  or the  $k$  intron comprises at least 2.0 kb.

9. (Original) Vector according to claim 1, said vector containing a regulatory unit which is compatible with bacteria.

10. (Previously presented) Vector according to claim 1, wherein the immunoglobulin of part b is a chimeric immunoglobulin.

11. (Original) Vector according to claim 1, wherein the DNA sequence of (b) encodes the domain of a human immunoglobulin chain.

12. (Original) Vector according to claim 1, wherein the DNA sequence of (b) encodes domains derived from mouse, rat, goat, horse or sheep.

13. (Original) Vector according to claim 1, wherein the DNA sequence of (b) encodes all the C domains of a secretory antibody.

14. (Original) Vector according to claim 1, wherein the DNA sequence according to (b) encodes all the C domains of a membrane-bound antibody.

15. (Original) Vector according to claim 1, characterized in that said DNA sequence of (c) encodes interleukins, interferons, colony-stimulating factors, lymphokins or growth factors.

16. (Original) Vector according to claim 15, characterized in that said DNA sequence of (c) encodes IL-2, IL-4, IL-7, IL-12, IL-13, GM-CSF or interferon  $\gamma$ .

17. (Currently amended) Vector according to claim 1, wherein the selectable marker gene is gpt, ~~neo~~ neo, or a marker gene encoding hygromycin resistance.

18-24. (Canceled)

25. (Withdrawn) Use of a vector according to claim 1 in the expression of immunoglobulin-cytokine fusion proteins in malignant B cells.

26. (Withdrawn) Use according to claim 25, wherein the malignant B cell is a B cell leukemia cell, a B cell lymphoma cell or a plasmacytoma cell.

27. (Withdrawn) Use according to claim 25, wherein by expression of the immunoglobulin-cytokine fusion proteins the activation of T cells is achieved.

28. (Withdrawn) Use of a vector according to claim 1 in malignant B cells for the vaccination of patients having malignant B cell diseases.

29. (Withdrawn) Malignant B cell containing a vector according to claim 1 in integrated form, wherein an immunoglobulin-cytokine fusion protein is expressed by said cell.

30. (Withdrawn) Use of a malignant B cell which has been rendered replication-incompetent and contains a vector according to claim 1 in integrated form and is capable of expression of an immunoglobulin-cytokine fusion protein in the treatment of patients having malignant B cell diseases.